URS OPERATING SERVICES

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August 11, 2009

Margaret Williams
Site Assessment Manager
U.S. Environmental Protection Agency, Region 8
Mail Code: 8EPR-B
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SUBJECT: START 3, EPA Region 8, Contract No. EP-W-05-050, TDD No. 0906-10
Trip Report, Block 35 Methylene Chloride Plume, Salt Lake City, Utah.

Dear Ms. Williams:

Attached is one copy of the draft trip report of the site activities conducted at the Block 35 Methylene Chloride Plume site in Salt Lake City, Utah. Field activities were conducted on July 14 and 15, 2009. This document is submitted for your review and approval.

If you have any questions, please call me at 303-291-8241.

Sincerely,

URS OPERATING SERVICES, INC.

Henry Schmelzer
Project Manager

cc: Kim Viehweg/UDEQ
Charles W. Baker/UOS (w/o attachment)
File/UOS

EPA ACTION BLOCK

- (X) Approved
- ( ) Approved, TDD to follow
- ( ) Approved as corrected
- ( ) Disapproved
- ( ) Review with _____
- ( ) Original to _____
- ( ) Copy to
- ( ) Reply envelope enclosed

8/13/09 Margaret Williams
Date By

TRIP REPORT

BLOCK 35 METHYLENE CHLORIDE PLUME SITE
Salt Lake City, Salt Lake County, Utah
CERCLIS ID No. UTN000802657

1.0 INTRODUCTION

URS Operating Services, Inc. (UOS), was tasked by the U.S. Environmental Protection Agency (EPA), under the Superfund Technical Assessment and Response Team 3 (START) contract # EP-W-05-050 Technical Direction Document (TDD) No. 0906-10, to provide technical support to the Region 8 Site Assessment Manager in conjunction with a site assessment at the Block 35 Methylene Chloride Plume site in Salt Lake City, Utah. Specifically, START was tasked to coordinate with the project manager from the Utah Department of Environmental Quality (UDEQ) and assist in the collection of subsurface soil and groundwater samples from various locations in the plume area. Field activities followed the applicable UOS Technical Standard Operating Procedures (TSOPs) and the Emergency Response Program generic Quality Assurance Project Plan (URS Operating Services, Inc. (UOS) 2005; UOS 1999).

The plume is located in a six-block area near 600 South and 200 East Street in Salt Lake City, Salt Lake County, Utah.

Site activities related to this assessment were conducted on July 14 and 15, 2009, and included the collection of nine subsurface soil samples and eleven groundwater samples.

2.0 BACKGROUND

In 1990 four underground storage tanks (USTs) were removed and eleven USTs were upgraded at the Ken Garff auto dealership and service shops located in the area known as Block 35 in Salt Lake City, Utah. Block 35 is bordered by 100 East and 200 East streets and 500 South and 600 South Streets. Dealerships in the block include Mercedes-Benz, Jaguar, Volvo, Mitsubishi, Hyundai, and Saab. Each of these locations has a service shop associated with it. In addition there are two other auto service locations for Safety Brakes and New Era Garage that are not associated with the Ken Garff Group.

Groundwater was encountered during the removal in 1990 of one of the tanks located in the northeast section of the block. Subsequent laboratory analyses identified gasoline and used oil constituents in the

groundwater. A monitoring well was installed adjacent to the excavation area to provide for additional groundwater monitoring. In 1992 two additional groundwater monitoring wells were installed in the block by the Ken Garff Group to provide for additional monitoring locations.

Although a cleanup was performed, additional groundwater analysis for chlorinated solvents was requested in 1997, and again in 2000, before site closure could be authorized by UDEQ. An analysis performed in 1999 in the first monitoring well indicated the presence of methylene chloride at 78 parts per billion (ppb). The drinking water quality standard for methylene chloride is 5 ppb. In 2000 UDEQ closed the UST file for the petroleum contamination but a letter was sent to the Ken Garff Group requesting that additional work be done to address the chlorinated solvent contamination. A follow-up investigation conducted in 2008 indicated that there had been no response from the Ken Garff Group about the letter.

The site had been placed on the CERCLIS list in 2006 and assigned the site number of UTN000802657 and a Preliminary Assessment was completed by UDEQ in 2009.

Findings from this Site Inspection will be used to evaluate if a significant release of methylene chloride or other non-petroleum materials has occurred or exists to warrant pursuing listing the site on EPA's National Priorities List or cleaning up the site under some other program or authority.

START involvement was to assist the UDEQ project manager in the collection of subsurface soil and groundwater samples as identified in the EPA approved UDEQ Site Inspection Work Plan (Utah Department of Environmental Quality (UDEQ) 2009). START provided geotechnical assistance by the collection of subsurface soil cores and the installation of temporary groundwater monitoring wells to be sampled and submitted for laboratory analysis by UDEQ.

Appropriate site maps from the UDEQ Site Inspection Work Plan are included in Appendix B.

3.0 SITE ACTIVITIES

START coordinated site activities with the UDEQ project manager, Kim Viehweg, and arranged for utility locates to be performed at the properties identified by the UDEQ project manager where sampling was to occur. Some of these locations were on state and city property including locations such as the Salt

Lake City Public Library, the Utah State Office of Education, and historic properties such as the Salt Lake County Court House and the Eighth South Artesian well.

START mobilized the EPA-owned Power Probe direct push equipment along with two START members from Denver, Colorado, on July 13, 2009, to travel to Salt Lake City and prepare to begin site activities on July 14, 2009.

START met the UDEQ project manager at the Salt Lake Public Library (Sample Location 08) at 0800 hours on July 14 (Figure 4 in Appendix B). The weather was clear, the temperature was expected to be in the 90 degrees F. After a site safety meeting and clearing local irrigation lines with a grounds manager for the library, START began the collection of subsurface soil cores and the installation of a temporary groundwater monitoring well. Soil cores were collected to 20 feet below ground surface (bgs) with groundwater encountered at approximately 9 feet bgs. A section of soil directly above the groundwater was collected for analysis by the UDEQ project manager. A temporary well was then constructed with 10 feet of slotted PVC screen followed by 10 feet of PVC riser to the ground surface. After purging approximately three gallons, the groundwater sample was collected by the UDEQ project manager. The borehole was abandoned after returning the unused portions of the soil cores into the borehole and adding bentonite to the ground surface.

START then moved to the next proposed borehole located in the southwest corner of the parking lot for the Salt Lake City Public Health Center. This was Location 07 identified in the site work plan (Appendix B, Figure 3). START again used the Power Probe to push to 20 feet bgs and collect soil cores. Groundwater was also encounter at approximately 10 feet bgs. The UDEQ project manager collected a soil sample from the soil interval directly above the groundwater and collected the groundwater sample after approximately three gallons of water had been purged from the temporary groundwater monitoring well.

After lunch START moved on to the locations in Block 35 and the Ken Garff Group properties. The first of the Block 35 wells was installed in the grassy area at the southwest corner of the Hyundai dealership at Location 04 (Appendix B, Figure 3). This was the area where the UST removal took place and where the groundwater was encountered and sampled that indicated petroleum product and methylene chloride contamination. The permanent well #1 that was installed in 1990 near here was paved over and not available for sampling. The soil cores were collected to 20 feet bgs and a strong petroleum odor was noted coming from the groundwater during purging. The water was initially black but then changed to

reddish brown characteristic of the sandy silt in the area. Water was indicated at ten feet bgs. A subsurface soil sample and groundwater sample were again collected by the UDEQ project manager.

START then moved to permanent groundwater monitoring well #2 installed in 1992 in the parking lot west of the Hyundai dealership building. No soil sample was collected here and the well was purged using polyethylene tubing and the peristaltic pump. This sample location was designated as GW-01 in the UDEQ work plan. Groundwater was noted at 7.5 feet bgs, was black, and had a petroleum odor. Once this well was sampled, START moved to the next location in Block 35.

The next sample location designated as Location 05 was on the southern edge of the property between the Saab dealership building and the former Safety Brakes building. START pushed to 20 feet bgs and collected soil cores before installing a temporary groundwater monitoring well at this location. The UDEQ project manager collected one soil sample and one groundwater sample from this location. The groundwater had a petroleum odor that was noted during the purging operation.

START finished operations for the day at this location.

START returned to the last Block 35 sample site at 0700 hours on July 15, 2009. This location designated as Location 06 in the work plan was located at the southwestern edge of the parking lot for the Mercedes-Benz dealership. At this location START collected core samples to 24 feet bgs. Groundwater was indicated at approximately 12.5 feet bgs and the soil was more clayey so it was determined to go deeper in order to produce enough water for sampling. Once the UDEQ project manager collected the subsurface soil and groundwater samples, START moved on to the next location.

The next location was located on the southern edge of the block known as Washington Square that is occupied by the historic Salt Lake City Court House. This sampling spot was designated as Location 09 in the work plan and was located in the middle of the block on the north side of 500 South Street. At this location the soil was very clayey and START pushed to 18 feet bgs to collect the soil cores and install the temporary groundwater monitoring well. The soil was moist at depths where water was developed at most of the other wells. This temporary well purged dry very quickly and recovered very slowly. The initial depth to groundwater was indicated at 17.5 feet bgs. START left this well to recharge and went on to the next location to continue collection of soil cores and groundwater samples.

START next went to the rear parking lot of the Decades clothing store located at 627 South State Street and designated as Location 10 in the UDEQ work plan. START pushed to 20 feet bgs to collect the soil cores and installed a temporary groundwater monitoring well. Groundwater was indicated at 10.5 feet bgs. The UDEQ project manager collected the subsurface soil sample and groundwater sample and then returned to the previous sampling Location 09 to check on the water level in the temporary groundwater monitoring well. A small amount of water was collected and placed into the water sample bottles. The well was left to recharge again while START went to the final sampling location at the Eighth South Artesian Well Park at the southwest corner of 800 South and 500 East Streets. START pushed to 16 feet bgs to collect the soil cores with abundant groundwater indicated at 8.5 feet bgs. Once the UDEQ project manager had collected the subsurface soil sample and the groundwater sample here START returned to the temporary well at the south side of the Salt Lake County Courthouse (Location 09) and was able to provide the remaining amount of groundwater needed to fill the rest of the groundwater sample bottles.

There was one other sampling location, Location 11, noted in the work plan at the Canella's Restaurant on the southeast corner of 500 South and 200 East Streets. However the owners informed the UDEQ project manager that they did not want to participate in the study and withdrew their permission for site access.

Once the last sample was collected at the Salt Lake County Courthouse START prepared to demobilize from the site and return to Denver the following day.

Groundwater parameters that were recorded are noted in Table 1. Groundwater parameters were not recorded for each location.

One site photo is provided in Appendix A.

4.0 SAMPLING AND ANALYSIS

START collected no samples as part of this project. All samples were collected and submitted for laboratory analysis by the UDEQ project manager.

5.0 LIST OF REFERENCES

URS Operating Services, Inc. (UOS). 1999. "Emergency Response Program – Generic Quality Assurance Project Plan."

URS Operating Services, Inc. (UOS). 2005. "Technical Standard Operating Procedures for the Superfund Technical Assessment and Response Team (START), EPA Region 8." September 2005.

Utah Department of Environmental Quality, Division of Environmental Response and Remediation. (UDEQ). 2009. Block 35 Methylene Chloride Plume, Salt Lake County, Utah, UTN000802657, Site Inspection Work Plan, May 8, 2009.

TABLE 1
Groundwater Sample Parameters

Sample Location	pH	Temperature (°C)	Conductivity (µS/cm)	Well Depth (feet bgs)	Depth to Groundwater (feet bgs)	Notes
GW-01	9.8	10	520	9.5	7.5	Strong odor
GW-02	NC	14.2	440	24	12.6	
GW-03	NC	23.1	1,300	16	8.2	
GW-04	NC	20.4	906	20	9.5	Strong odor
GW-05	NC	21	1,100	20	10	Odor
GW-06	NC	18.1	1,342	20	10.5	
GW-07	10.2	20	638	20	9.5	
GW-08	NC	NC	NC	20	10	
GW-09	NC	NC	NC	18	17.5	
GW-10	NC	18.5	1,152	20	10.5	

NC not collected
bgs below ground surface
°C degrees Celsius
µS/cm micro Siemens per centimeter

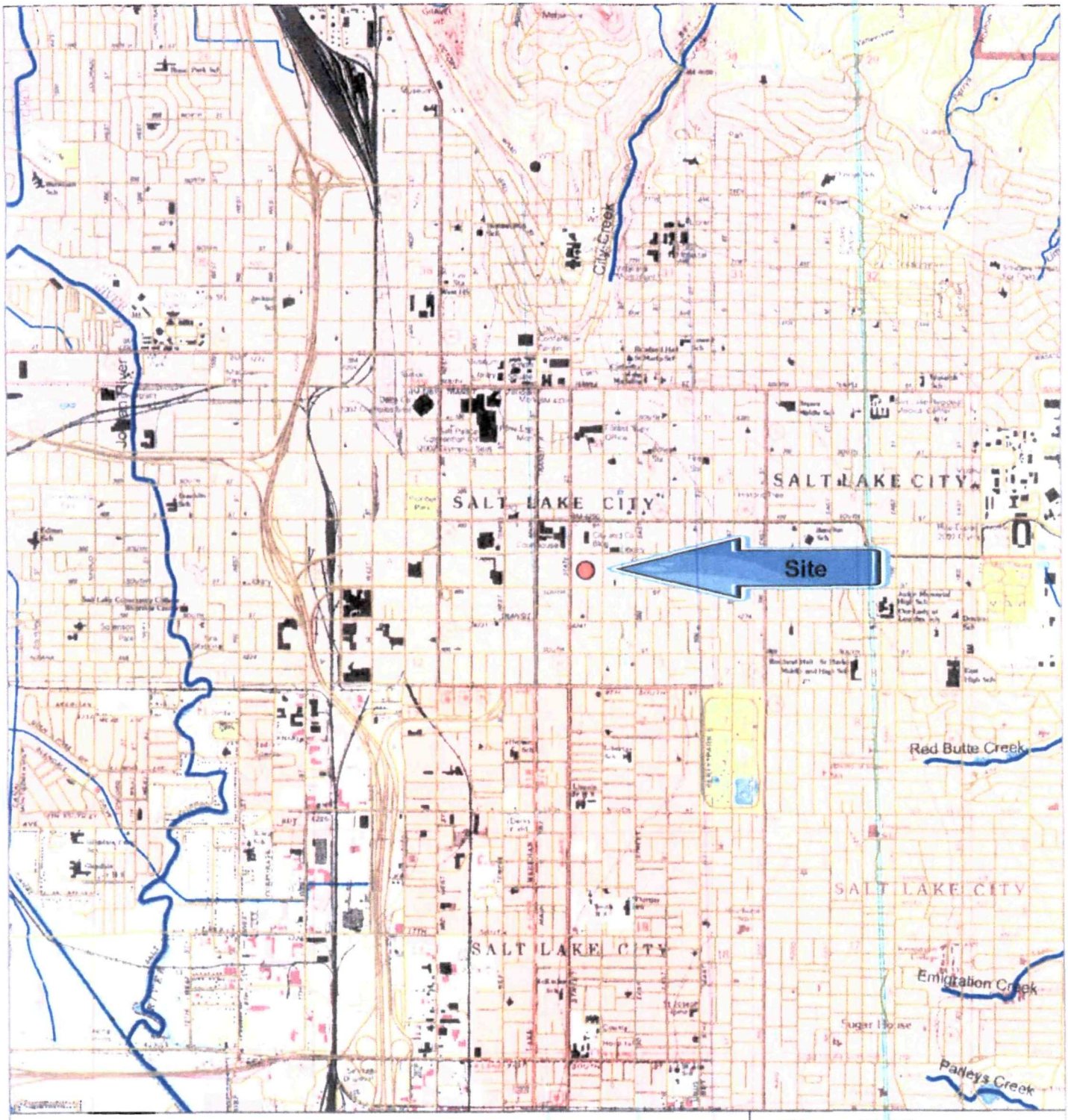
APPENDIX A

Photolog

PHOTO 1
Sample location at the south end of the block near the Salt lake County Court House, historic landmark.

APPENDIX B

Site Maps from Utah Department of Environmental Quality Site Inspection Work Plan



0 0.5 1 2 3 Miles

Utah Department of Environmental Quality
Division of Environmental Response and Remediation

Legend

- Block 35 Methylene Chloride Plume site
- Major Roads
- Railroads
- Water Courses

Base Map: United States Geological Survey topographic map, 1999

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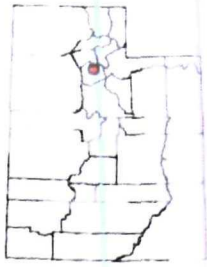


Figure 1
Site Location

Block 35
Methylene Chloride Plume
Salt Lake County, Utah

by: Kim Viehweg date: 7/23/08

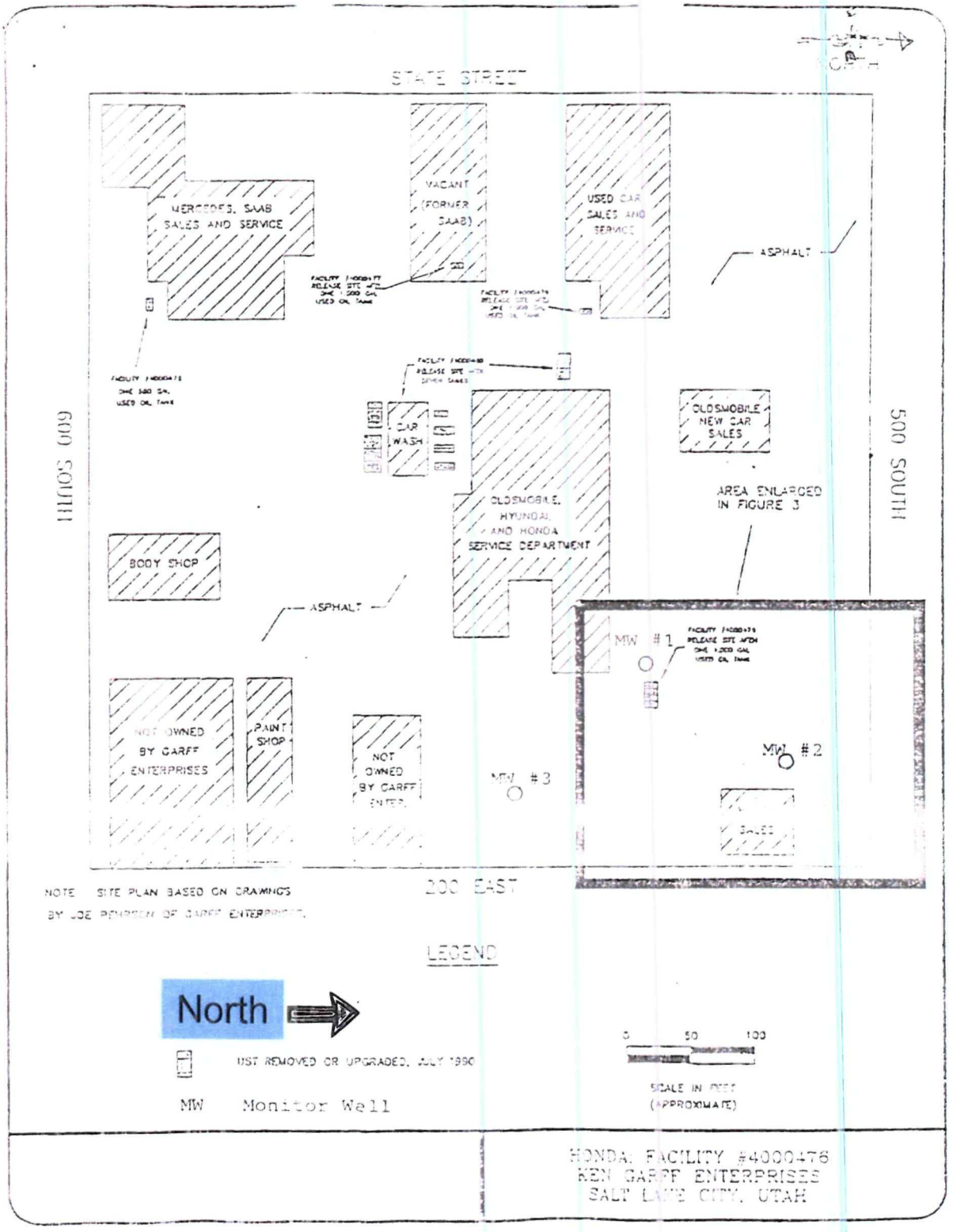
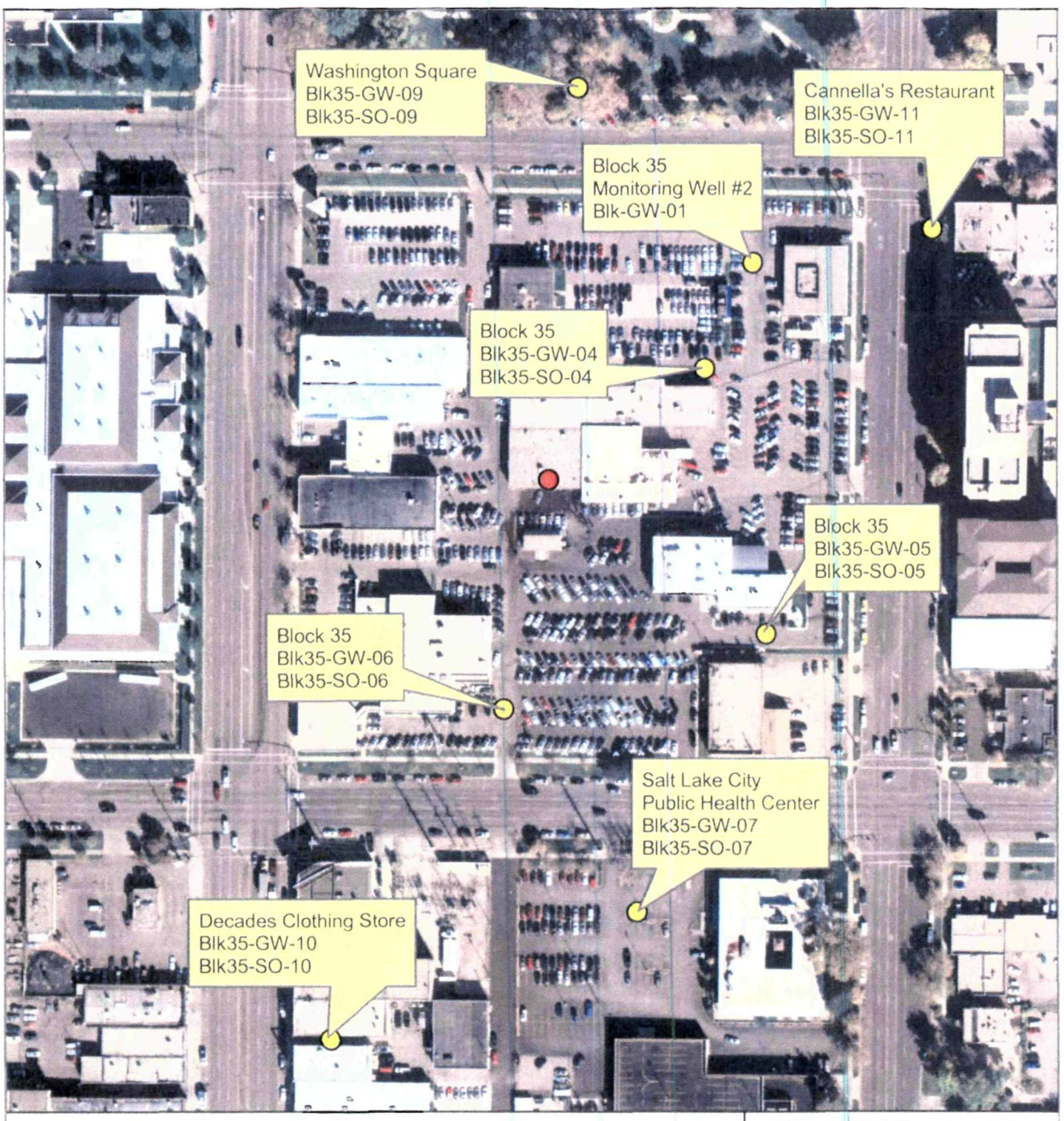


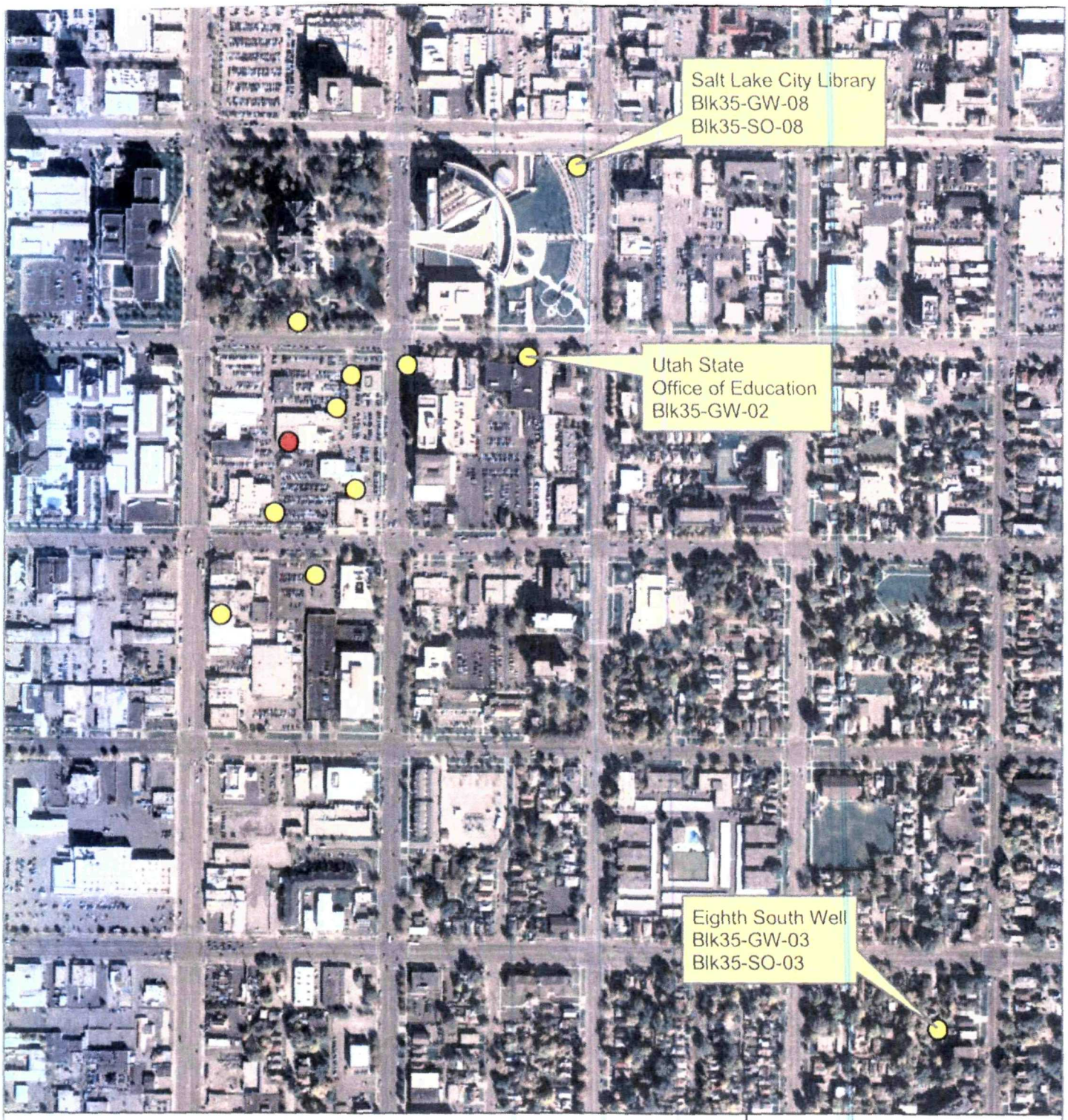
Figure 2: Historic Site Plan: Block 35 Methylene Chloride Plume Site , Salt Lake City, Utah



Utah Department of Environmental Quality
Division of Environmental Response and Remediation

Figure 3
Site Sampling Locations
(Map 1)
Block 35
Methylene Chloride Plume
Salt Lake County, Utah

by: Kim Viehweg date: 1/15/09



0 0.125 0.25 0.5 Miles

Utah Department of Environmental Quality
Division of Environmental Response and Remediation

Legend

- Block 35 Methylene Chloride Plume site
- Proposed Groundwater and/or Soil Sample Locations

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Aerial photograph obtained from the State of Utah GIS database, 2006

Figure 4
Site Sampling Locations
(Map 2)
Block 35
Methylene Chloride Plume
Salt Lake County, Utah

by: Kim Viehweg date: 1/15/09